APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,872	12/28/2001	W. Richard Purcell, JR.		1462

7590 02/27/2007	**EXAMINER**
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ART UNIT	PAPER NUMBER
3692	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
Office Action Summary	10/034,872	PURCELL,, W. RICHARD
	Examiner	**Art Unit**	
	Clement B. Graham	3692	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>12/28/01</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-74</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-74</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
       1.☐ Certified copies of the priority documents have been received.
       2.☐ Certified copies of the priority documents have been received in Application No. _____.
       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

U.S. Patent and Trademark Office
PTOL-326 (Rev. 08-06)   Office Action Summary   Part of Paper No./Mail Date 20070219

DETAILED ACTION

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 and 70,   are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Applicant's claims are directed to an algorithm.   ", however these steps are mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, for example) and abstract ideas without a practical application are found to be non-statutory subject matter. Therefore, Applicant's claims are non-statutory as they do not produce a useful, concrete and tangible result.

Claim Rejections - 35 USC § 112

2   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.   Claims 1 and 70,   are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In particular, Claims 1and 70,   recites the words [" unique allocation proportions, best diversified portfolios,"].

However this language fails to distinctly claim Applicant's invention because the scope of the claim is unclear. Moreover the specification fails to clarify, the meaning of the limitations. Appropriate correction is required.

Claim Rejections - 35 USC § 102

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.   Claims 1-74, are rejected under 35 U.S.C. 102(b) as being anticipated by Edesess U.S
Patent: 5, 884, 287.

As per claim 1, Edesess discloses a method that relates to finding best investment
portfolio plans for long-term financial plans and goals, comprising:
obtaining information on a plurality of investment categories, information on a financial
plan, and information on portfolio plans, said information on a plurality of
investment categories including data on return rates per investment period
including an expected return rate and a return rate standard deviation for each of
said investment categories and a return rate correlation coefficient for each pair
of said investment categories(see abstract and column 2 lines 31-67 and column 3 lines
1-29 and column 4 lines 4-67 and column 5-7 lines 1-67) said information on said
financial plan including a time horizon comprising a plurality of investment periods, at
least a first investment amount in a portfolio plan in a first investment period in said time
horizon, and at least a second investment amount put into or a first withdrawal
amount taken from said portfolio plan in a subsequent investment period of said time
horizon; and said information on portfolio plans including information useful for defining
a series of portfolio plans in which at least a first portfolio plan in a series comprises a
plurality of portfolios, each portfolio being a number of said investment categories in
particular unique allocation proportions(see abstract and column 2 lines 31-67 and
column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67) and
providing at least a first comparison of a series of best-diversified portfolio plans with
respect to at least a first criterion relative to the final wealth of a portfolio plan, wherein:
each of said best-diversified portfolio plans conforms to said information on portfolio
plans and comprises a number of best-diversified portfolios, each of said best-
diversified portfolios having an expected return rate and the smallest return rate
standard deviation of any portfolio having the same said expected return rate in a
population of portfolios each comprising a number of said investment categories;
said final wealth is the value of a portfolio plan at the end of said time horizon using said
portfolio plan for said financial plan and has a probability distribution(see abstract and

column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67) and said first criterion comprises a value for said final wealth and a probability that said final wealth will equal or exceed said value and is determined for a portfolio plan using simulation. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 2, Edesess discloses wherein: said investment period is the year. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 3, Edesess discloses wherein at least one of said investment categories is an asset class. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 4, Edesess discloses wherein at least one of said investment categories is a mutual fund or other investment vehicle. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 5, Edesess discloses wherein: said obtaining step includes displaying identifications of a number of investment categories from which the user may choose said plurality of investment categories. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 6, Edesess discloses wherein: said displaying step includes displaying said data on return rates of said investment categories. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 7, Edesess discloses wherein: said displaying step includes enabling revision or replacement by the user of at least one of said identifications or said data on return rates. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 8, Edesess discloses wherein:

said financial plan includes a desired value for final wealth of a portfolio plan at the end of said time horizon. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 9, Edesess discloses wherein:

said financial plan includes a plurality of investment amounts or portions of investment amounts subject to different rules of taxation. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 10, Edesess discloses wherein said financial plan includes said first withdrawal amount. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 11, Edesess discloses wherein:

said financial plan includes data to enable calculation of amounts and time periods of deductions from a portfolio plan for fees and costs and for taxes including deductions based on investment returns, withdrawals from a portfolio, and portfolio value. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 12, Edesess discloses wherein:

said financial plan includes at least a first inflation rate to enable calculation of inflation adjustments of future values. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 13, Edesess discloses wherein:

said financial plan includes information defining as a probability distribution said number of said investment periods in said time horizon, said first inflation rate, or any other item of said information on said financial plan. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 14, Edesess discloses wherein:

any investment amount, withdrawal amount, final wealth, or other measure of financial value may be expressed either before or after adjustment for any of the following: any fees and costs, any taxes, any inflation. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 15, Edesess discloses wherein:

said providing step includes applying concepts of Modem Portfolio Theory using said data on return rates of said plurality of investment categories to obtain information defining an efficient frontier curve on a graph, said curve comprising a range of portfolio points each representing a number of best-diversified portfolios in said population. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 16, Edesess discloses wherein:

said applying step includes applying concepts and methods known collectively as CAPM including investing or borrowing at a rate commonly termed a "risk-free" rate.

As per claim 17, Edesess discloses wherein:

said population of portfolios includes only portfolios having allocation proportions that conform to at least a first allocation constraint defining a minimum or maximum total allocation proportion for a number of said investment categories. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 18, Edesess discloses wherein:

said population of portfolios includes only portfolios in which the allocation proportions of said investment categories are integer multiples of an integer allocation percentage increment. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 19, Edesess discloses wherein:

said portfolios are grouped and characterized with respect to expected return rate according to an incremental sequence of expected return rates. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 20, Edesess discloses wherein:

said applying step includes displaying said efficient frontier curve on an efficient frontier graph with axes representing expected return rate and return rate standard deviation.

(see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 21, Edesess discloses wherein:
said displaying step includes showing on said efficient frontier graph a number of portfolio points each representing a user-specified portfolio. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 22, Edesess discloses wherein:
said displaying step includes enabling user interaction with said graph including choosing at least a first portfolio point and showing information for said first portfolio point graphically and numerically, said information including an expected return rate, a return rate standard deviation, and allocation proportions of at least a first portfolio corresponding to said first portfolio point. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 23, Edesess discloses wherein:
said information includes allocation proportions for each of a plurality of portfolios in said population determined to best correspond to said first chosen portfolio point. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 24, Edesess discloses wherein:
said information includes upper and lower limits at a specified confidence level for the highest and lowest return rate in the best and worst investment periods of said time horizon. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 25, Edesess discloses wherein:
each of said portfolio plans comprises a plurality of component portfolio plans in which separate investment amounts or separate portions of investment amounts may be placed. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 26, Edesess discloses wherein:

said component portfolio plans in a portfolio plan are subject to different rules of taxation. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 27, Edesess discloses wherein:

said component portfolio plans in a portfolio plan comprise different portfolios. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 28, Edesess discloses wherein:

at least one portfolio plan or component portfolio plan is rebalanced at the end of at least a first investment period, having at the start of the next investment period the same portfolio as at the start of said first investment period. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 29, Edesess discloses wherein:

at least one portfolio plan or component portfolio plan is reallocated at least once during said time horizon, comprising one portfolio before said reallocation and another portfolio after said reallocation. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 30, Edesess discloses wherein:

said series comprises portfolio plans that each have the same number of component portfolio plans and are all defined according to a common system of increments and limits regarding portfolios in the first investment period of said time horizon and times and methods of rebalancing and reallocation of portfolios in subsequent investment periods of said time horizon. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 31, Edesess discloses wherein:

said first criterion is the probability that said final wealth will equal or exceed a desired value for final wealth. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 32, Edesess discloses wherein:

said first criterion is the highest value that said final wealth has a predetermined
probability of equaling or exceeding. (see abstract and column 2 lines 31-67 and column
3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 33, Edesess discloses wherein:
said providing step includes producing a number of simulations of said financial plan
using a portfolio plan for which assessment is to be performed. (see abstract and
column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7
lines 1-67).

As per claim 34, Edesess discloses wherein:
said producing step includes determining separately for each investment period of each
simulation a return rate for at least a first portfolio of said portfolio plan for said
investment period by random selection from a probability distribution for the return rate
of said portfolio. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and
column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 35, Edesess discloses wherein:
said probability distribution for a return rate is determined using an expected return rate
and a return-rate standard deviation and assuming one of a number of shapes for said
probability distribution. (see abstract and column 2 lines 31-67 and column 3 lines 1-29
and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 36, Edesess discloses wherein:
said assuming step includes assuming that said shape of said probability distribution is
normal or lognormal(see abstract and column 2 lines 31-67 and column 3 lines 1-29 and
column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 37, Edesess discloses wherein:
said determining step includes establishing said probability distribution for the return
rate of at least one portfolio in at least one investment period using at least a first serial
correlation coefficient reflecting an effect upon said probability distribution of at least
one return rate in at least one previous investment period. (see abstract and column 2
lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-
67).

As per claim 38, Edesess discloses wherein:

said determining step includes ascertaining for at least one investment period a return rate for at least a second portfolio in said portfolio plan in said investment period by random selection from a probability distribution for said return rate determined using a return rate randomly selected for said first portfolio for said investment period and the covariance of the return rates of said first portfolio and said second portfolio. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 39, Edesess discloses wherein:

said producing step includes for each simulation determining a return rate for each portfolio in a portfolio plan in each investment period of said time horizon by random selection of a historical investment period using actual historical return rates of investment categories for the selected historical investment period. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 40, Edesess discloses wherein:

said producing step includes for each simulation using historical return rates of investment categories for a series of consecutive historical investment periods equal in number to the number of investment periods in said time horizon. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 41, Edesess discloses wherein:

said producing step includes determining values of a number of items in said financial plan by random selection from probability distributions of values of said items. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 42, Edesess discloses wherein:

said producing step includes grouping final wealths produced by said simulations according to a scale of value increments to develop a final wealth frequency distribution(see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column

4 lines 4-67 and column 5-7 lines 1-67) interpreting said final wealth frequency distribution as a final wealth probability distribution, and using said probability distribution to determine specifications of said probability distribution such as the expected final wealth or the median final wealth, the probability that the final wealth will equal or exceed a value, or the largest value that the final wealth has a probability of equaling or exceeding. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 43, Edesess discloses wherein:
said producing step includes producing said simulations using each portfolio plan in said series. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 44, Edesess discloses wherein:
said providing step includes comparing in said first comparison a number of portfolio plans designated by the user. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 45, Edesess discloses wherein:
said providing step includes displaying for each of said series of portfolio plans a plurality of the following: identifying name, symbol, or number; expected final wealth; median final wealth; probability that the final wealth will equal or exceed a predetermined amount(see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67) highest amount that the final wealth has a predetermined probability of equaling or exceeding; an expected return rate characteristic of the portfolio plan; a return-rate standard deviation characteristic of the portfolio plan; a lowest-return-rate characteristic of the portfolio plan for an individual investment period relative to a predetermined probability; and a lowest-return-rate characteristic of the portfolio plan for the investment period in which said characteristic is lowest of all investment periods in said time horizon relative to a predetermined probability. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 46, Edesess discloses wherein:

said providing step includes presenting said first comparison graphically. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 47, Edesess discloses wherein:

said presenting step includes displaying said first comparison in a graph with a first axis representing said first criterion, a second axis representing a second measure of said portfolio plan, and a portfolio plan point representing each portfolio plan in said series relative to said first axis and said second axis. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 48, Edesess discloses a wherein:

said second measure is one of the following: identifying name, symbol, or number; expected final wealth; median final wealth; probability that the final wealth will equal or exceed a predetermined amount(see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67)

highest amount that the final wealth has a predetermined probability of equaling or exceeding; an expected return rate characteristic of the portfolio plan; a return-rate standard deviation characteristic of the portfolio plan; a lowest-return-rate characteristic of the portfolio plan for an individual investment period relative to a predetermined probability; and a lowest-return-rate characteristic of the portfolio plan for the investment period in which said characteristic is lowest of all investment periods in said time horizon relative to a predetermined probability. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 49,   Edesess discloses wherein:

said displaying step includes choosing by the user of at least a first portfolio plan point represented on said graph. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67)..

As per claim 50,   Edesess discloses wherein:

said choosing step includes choosing by the user of a value along an axis of said graph from which value said first portfolio plan point is designated. (see abstract and column 2

lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 51, Edesess discloses wherein:

said choosing step includes displaying values associated with said first portfolio plan point relative to each axis of said graph. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 52, Edesess discloses wherein:

said choosing step includes identifying at least a first portfolio plan designated to correspond to said first portfolio plan point. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 53, Edesess discloses wherein:

said identifying step includes displaying allocation proportions of at least a first portfolio of said first portfolio plan. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 54, Edesess discloses wherein:

said displaying step includes presenting additional information necessary to determine all allocation proportions of all portfolios in said first portfolio plan in each investment period of said time horizon. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 55, Edesess discloses wherein:

said choosing step includes identifying each of a plurality of portfolio plans designated to correspond to said first portfolio plan point. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 56, Edesess discloses wherein:

said choosing step includes selecting at least a first portfolio plan corresponding to a point on said graph. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 57, Edesess discloses wherein:

said selecting step includes displaying a probability distribution graph showing a probability distribution of the final wealth of said first portfolio plan. (see abstract and

column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 58, Edesess discloses wherein:

said displaying step includes showing on said probability distribution graph a probability distribution of the final wealth of a second portfolio plan. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 59, Edesess discloses wherein:

said displaying step includes indicating by the user of a target value for the final wealth of a portfolio plan. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 60, Edesess discloses wherein:

said indicating step includes showing for each of a number of portfolio plans represented on said probability distribution graph the probability that the final result will equal or exceed said target value. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 61, Edesess discloses wherein:

said selecting step includes displaying a simulations graph showing at least a first simulation of the progression of portfolio value investment period by investment period through the time horizon for said first portfolio plan. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 62, Edesess discloses wherein:

said displaying step includes showing on said simulations graph a plurality of said 25 simulations. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 63, Edesess discloses wherein:

said displaying step includes showing on said simulations graph a number of said simulations far a second portfolio plan. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 64, Edesess discloses wherein:

said selecting step includes displaying a sensitivity graph in which a first axis represents a range of values for a first item of said financial plan, a second axis represents a range of values for said first criterion, and values are represented for said first criterion of said first portfolio plan for each of a plurality of values of said first item of said financial plan. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 65, Edesess discloses wherein:

said first item of said financial plan is said time horizon. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 66, Edesess discloses wherein:

said displaying step includes showing on said sensitivity graph values for said first criterion of a second portfolio plan for each of a plurality of values of said first item of said financial plan. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 67, Edesess discloses wherein:

said displaying step includes showing on said sensitivity graph a plurality of curves each representing a different value for a second item of said financial plan and showing values of said first criterion of said first portfolio plan for each of a plurality of values of said first item of said financial plan. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 68, Edesess discloses wherein:

said displaying step includes choosing by the user of a value for each of a number of items of said financial plan and displaying a corresponding value of said first criterion for said first portfolio plan. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 69, Edesess discloses wherein:

said obtaining step includes providing a user interface on a screen of a computer or other electronic device for user selectable display of said information including entry boxes in which the user may make entries or changes in said information and buttons or

other interaction objects by which the user may make selections pertaining to said information. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 70, Edesess discloses wherein:

said providing step includes providing a user interface on a screen of a computer or other electronic device for user selectable display of a number of said comparisons, graphs, and information on portfolio plans, including scrollbars, buttons, or other objects through which the user may make selections and cant' out other interactions relative to said comparisons, graphs, and information. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 71, Edesess discloses an apparatus that relates to finding best investment portfolio plans for long-term financial plans and goals, comprising: computer memory for storing information on a plurality of investment categories, information on a financial plan, and information on portfolio plans, said information on a plurality of investment categories including data on return rates per investment period including an expected return rate and a return rate standard deviation for each of said investment categories and a return rate correlation coefficient for each pair of said investment categories(see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67) said information on said financial plan including a time horizon comprising a plurality of investment periods, at least a first investment amount in a portfolio plan in a first investment period in said time horizon, and at least a second investment amount put into or a first withdrawal amount taken from said portfolio plan in a subsequent investment period of said time horizon; and said information on portfolio plans including information useful for defining a series of portfolio plans in which at least a first portfolio plan in a series comprises a plurality of portfolios, each portfolio being a number of said investment categories in particular unique allocation proportions(see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67) and at least a first computer processor for providing at least a first comparison of a series of best-diversified portfolio

plans with respect to at least a first criterion relative to the final wealth of a portfolio plan, wherein:

each of said best-diversified portfolio plans conforms to said information on portfolio plans and comprises a number of best-diversified portfolios, each of said best-diversified portfolios having an expected return rate and the smallest return rate standard deviation of any portfolio having the same said expected return rate in a population of portfolios each comprising a number of said investment categories(see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67) said final wealth is the value of a portfolio plan at the end of said time horizon using said portfolio plan for said financial plan and has a probability distribution; and

said first criterion comprises a value for said final wealth and a probability that said final wealth will equal or exceed said value and is determined for a portfolio plan using simulation. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 72, Edesess discloses further comprising:

an electronic display screen for displaying at least said first comparison including display of said first comparison in a graph. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 73, Edesess discloses further comprising:

input devices for the user to enter, select, change, and otherwise determine said information and information on portfolio plans and to interact with said comparisons including selection of said information and comparisons to be displayed on an electronic display screen. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

As per claim 74, Edesess discloses further comprising:

communication devices for obtaining electronically said information from other computers and for sending said information and comparisons to other computers. (see abstract and column 2 lines 31-67 and column 3 lines 1-29 and column 4 lines 4-67 and column 5-7 lines 1-67).

Conclusion

6.   The prior art of record and not relied upon is considered pertinent to Applicants disclosure.

Walker et al (US 2001/0042785 A1 PUB) teaches method and apparatus for funds and credit line transfer.

W eichert et al (US 2004,0117302 Pub) teaches payment management.

Jones er al. et all (US Patent 6, 021, 397) teaches financial advisory system.

Any inquiry concerning this communication or earlier communications from the   examiner should be directed to Clement B Graham whose telephone number is 703-305-1874. The examiner can normally be reached on 7am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 703-308-0505. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-0040 for regular communications and 703-305-0040 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CG
February 17, 2007

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PRIMARY EXAMINER
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